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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
Office Action Summary	10/701,167	CHAULK ET AL.
	Examiner	Art Unit	
	Chau Nguyen	2176	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *29 May 2007*.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,4-10,12-17,20-24,26-29,31,32,34-37 and 39-43* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,4-10,12-17,20-24,26-29,31,32,34-37 and 39-43* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some *   c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

1.   A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection.   Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114.   Applicant's submission filed on 05/29/2007 has been entered.   Claims 1, 4-10, 12-17, 20-24, 26-29, 31-32, 34-37 and 39-43 are pending.   Claims 1, 17, 31, 32, 34, 35, 36 and 39 are independent claims.

Claim Rejections - 35 USC § 112

2.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3.   Claims 31, 35-37 and 39-43 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

4.   The terms "excessively large", "range of entries", and "substantially less" in claim 31, 35, 37 and 39 are relative terms, which render the claims indefinite.   The terms "excessively large", "range of entries", "substantially less" are not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

Claim Rejections - 35 USC § 103

5.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

6.   **Claims 1, 4-8, 15-16, 32, 34, 35 and 39-43 are rejected under 35 U.S.C. 103(a)**

as being unpatentable over Woodmansee et al. (Pub. No.: US 2002/0178140 A1;

Filed may 25, 2001) (hereinafter 'Woodmansee') in view of Yankovsky, US Patent

Application Publication No. US 2004/0117381.

In regards to independent claim 1, Woodmansee discloses *a computer*

program product having computer program code embodying an encoded set of

processor based instructions on a computer readable medium for performing, via a

processor responsive to the instructions, a method of organizing and generating report

data renderable on a graphical user output device indicative of a plurality of

manageable entities in a managed information network comprising (0017; Woodmansee

discloses a computer program product comprising a computer useable medium having

computer program logic stored thereon for enabling a processor in a computer system

to organize data.):

        determining an output criteria applicable to a set of data to compute an ordered

output display set adapted for inclusion in a report, the determined output criteria

including (0003; 0014; Woodmansee discloses developing a set of data filters or other

criteria for selecting relevant information from the database. Woodmansee further

discloses extracting data from the database system using filters *(output criteria)*, and

processing the extracted data to produce sorted datasets);

  a selection criteria indicative of output records for inclusion in the candidate

entries (0003; Woodmansee discloses developing a set of data filters or other criteria for

selecting relevant information from the database);

  an arrangement criteria indicative of display formatting applicable to the

candidate entries (0003; Woodmansee discloses developing a set of data filters or other

criteria for selecting relevant information from the database. The resulting output of a

database query might be transferred to another application (i.e. spreadsheet

application) for examination, sorting and calculation if necessary. The results can further

be transferred to an application such as presentation software for report generation and

charting);

  the selection criteria including a filtering criteria, applying further comprising

filtering according to the filtering criteria, the filtering operable to designate a subset of

entries for inclusion in the first pass and the filtering criteria operable on at least one of

*the fields for comparison and selective inclusion in the designated subset (*0003;

Woodmansee discloses developing a set of data filters or other criteria for selecting

relevant information from the database. 0014; Woodmansee discloses extracting data

from the database system using filters *(filtering criteria)*, and processing the extracted

data to produce sorted datasets *(subset)*. At the time of the invention it would have been

obvious to a person of ordinary skill in the art that in order to produce a sorted dataset

(subset), the data would undergo a comparison process to determine the ordering of the

data);

omitting from memory, in the second pass, entries in the parsed plurality of

entries outside the candidate set (At the time of the invention it would have been

obvious to a person of ordinary skill in the art that the data outside the determined

criteria would not be included in the acceptable dataset which is to be stored);

processing, during the second pass, the computed subset of candidate entries

according to the determined output criteria to generate the ordered output display set of

entries in a tangible medium of expression on the graphical user output device (0014;

Woodmansee discloses extracting data from the database system using filters *(output*

criteria) , and processing the extracted data to produce sorted datasets);

Woodmansee does not expressly disclose *parsing, in a first pass, a plurality of*

entries in the set of data;

applying, during the first pass, the determined output criteria to a portion of each

parsed entry to compute a subset of candidate entries;

parsing, in a second pass, the computed subset of candidate entries, the second

pass performed on the same set of data unmodified from the first pass;

Yankowsky discloses the source parser parses the source document to locate

values called for the result XML, the values may be stored in an areas of memory that

may be referred to as a values storage cache in the first part parse (first pass), and in

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the second pass, the output controller populates the values stored in the storage cache

in the result document (pages 2-3, paragraphs [0022]-[0033]).

It would have been obvious to one of ordinary skill in the art at the time the

invention was made to combine the teachings of Yankowsky with Woodmansee to

include *parsing, in a first pass, a plurality of entries in the set of data; applying, during*

the first pass, the determined output criteria to a portion of each parsed entry to

compute a subset of candidate entries; and parsing, in a second pass, the computed

subset of candidate entries, the second pass performed on the same set of data

unmodified from the first pass. The techniques of Yankowsky may be used to control

the amount of memory that needs to be allocated to a memory cache sued in the

mapping of the source file to the result file, and the techniques can reduce the number

of passes that a parser needs to make through a source file in order to locate the values

called for in the result file (page 1, paragraph [0010]).

In regards to dependent claims 4, Woodmansee discloses *the method of claim*

1, further comprising retaining in a memory, in the first pass, only the selection and

arrangement criteria fields (0014; Woodmansee discloses extracting data from the

database system using filters *(output criteria)*, and processing the extracted data to

produce sorted datasets. Woodmansee further disclose storing the analysis object

(selection and arrangement criteria fields) in an analysis database in the network

server.).

In regards to dependent claims 5, Woodmansee discloses *the method of claim*

1 wherein the selection criteria corresponds to displayable entries operable for

simultaneous display on an output device (0038; Woodmansee discloses the raw data

(displayable entries) is filtered and displayed on each client computer. Each client

computer may further be loaded with applications such as Excel, MINTLAB, PowerPoint

and PLADB. Thus, these applications allow the displayable entries to be displayed

simultaneously.).

In regards to dependent claims 6, Woodmansee discloses *the method of claim*

1 wherein the arrangement criteria is indicative of ordering logic applicable to a subset

of fields each of the entries based on a comparison of the fields in the entries (0014;

Woodmansee discloses extracting data from the database system using filters *(output*

criteria), and processing the extracted data to produce sorted datasets. At the time of

the invention it would have been obvious to a person of ordinary skill in the art that in

order to produce a sorted dataset, the data would undergo a comparison process to

determine the ordering of the data.).

In regards to dependent claims 7, Woodmansee discloses *the method of claim*

6 wherein the ordering logic processes at least one of the fields according to ascending

or descending values (0014; 0038; Woodmansee discloses extracting data from the

database system using filters *(output criteria)*, and processing the extracted data to

produce sorted datasets. At the time of the invention it would have been obvious to a

person of ordinary skill in the art that in order to produce a sorted dataset, the data

would undergo a comparison process to determine the ordering of the data.

Woodmansee further discloses the raw data *(dataset)* is filtered and displayed on each

client computer. Each client computer may further be loaded with applications such as

Excel. It has been established and is well known in the art that applications such as

Excel, can sort a dataset in either alphabetical or numerical order, depending on the

data type of the dataset, thus sorting the dataset according to *ascending or descending*

values.).

In regards to dependent claims 8, Woodmansee discloses *the method of claim*

1 wherein the determined criteria is operable on key fields of the entries, the key fields

having scalar values operable for comparison (0014; 0038; Woodmansee discloses

extracting data from the database system using filters *(output criteria)*, and processing

the extracted data to produce sorted datasets. At the time of the invention it would have

been obvious to a person of ordinary skill in the art that in order to produce a sorted

dataset, the data would undergo a comparison process to determine the ordering of the

data. Woodmansee further discloses the raw data *(dataset)* is filtered and displayed on

each client computer. Each client computer may further be loaded with applications

such as Excel. It has been established and is well known in the art that applications

such as Excel, can sort a dataset in either alphabetical or numerical order *(scalar*

values), depending on the data type of the dataset, thus sorting the dataset according to

ascending or descending values.).

In regards to dependent claim 15, Woodmansee discloses *the method of claim 1 wherein the first pass further comprises filtering entries for omission from the candidate set and comparing key fields in entries for inclusion in the candidate set* (0003; 0014; Woodmansee discloses developing a set of data filters or other criteria for selecting relevant information from the database. Woodmansee further discloses extracting data from the database system using filters, and processing the extracted data to produce sorted datasets. At the time of the invention it would have been obvious to a person of ordinary skill in the art that in order to produce a sorted dataset, the data would undergo a comparison process to determine the ordering of the data.).

In regards to dependent claim 16, Woodmansee discloses *matching entries for inclusion in the candidate set, sorting entries in the candidate set, and formatting entries in the candidate set for display on the output device* (0003; 0014; Woodmansee discloses developing a set of data filters or other criteria for selecting relevant information from the database. Using the broadest interpretation, the Examiner believes these criterias to include, but not be limited to *matching entries for inclusion in the candidate set, sorting entries in the candidate set, and formatting entries in the candidate set for display on the output device.* Woodmansee further discloses extracting data from the database system using filters *(output criteria)*, and processing the extracted data to produce sorted datasets.)

Woodmansee does not expressly disclose a *second pass*.

Yankowsky discloses the source parser parses the source document to locate values called for the result XML, the values may be stored in an areas of memory that may be referred to as a values storage cache in the first part parse (first pass), and in the second pass, the output controller populates the values stored in the storage cache in the result document (pages 2-3, paragraphs [0022]-[0033]).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Yankowsky with Woodmansee to include *parsing, in a first pass, a plurality of entries in the set of data; applying, during the first pass, the determined output criteria to a portion of each parsed entry to compute a subset of candidate entries; and parsing, in a second pass, the computed subset of candidate entries, the second pass performed on the same set of data unmodified from the first pass. The techniques of Yankowsky may be used to control the amount of memory that needs to be allocated to a memory cache sued in the mapping of the source file to the result file, and the techniques can reduce the number of passes that a parser needs to make through a source file in order to locate the values called for in the result file (page 1, paragraph [0010]).*

In regards to independent claim 32, Woodmansee discloses a *computer program product having a computer readable medium operable to store computer program logic embodied in encoded set of processor based instruction encoded thereon for performing, via a processor responsive to the instructions, organizing and generating report data renderable on a graphical user output device indicative of a*

plurality of manageable entities in a managed information network comprising (0017;

Woodmansee discloses a computer program product comprising a computer useable

medium having computer program logic stored thereon for enabling a processor in a

computer system to organize data.)*:*

computer program code for determining an output criteria applicable to a set of

data to compute an ordered output display set adapted for inclusion in a report, the

determined output criteria including:

a selection criteria indicative of output records for inclusion in the candidate

entries (0003; Woodmansee discloses developing a set of data filters or other criteria for

selecting relevant information from the database.), *the selection criteria including a*

filtering criteria, applying further comprising filtering according to the filtering criteria, the

filtering operable to designate a subset of entries for inclusion in the first pass and the

filtering criteria operable on at least one of the fields for comparison and selective

*inclusion in the designated subset (*0003; Woodmansee discloses developing a set of

data filters or other criteria for selecting relevant information from the database. 0014;

Woodmansee discloses extracting data from the database system using filters *(filtering*

criteria), and processing the extracted data to produce sorted datasets *(subset)*. At the

time of the invention it would have been obvious to a person of ordinary skill in the art

that in order to produce a sorted dataset *(subset)*, the data would undergo a comparison

process to determine the ordering of the data);

an arrangement criteria indicative of display formatting applicable to the

candidate entries (0003; Woodmansee discloses developing a set of data filters or other

criteria for selecting relevant information from the database. The resulting output of a

database query might be transferred to another application (i.e. spreadsheet

application) for examination, sorting and calculation if necessary. The results can further

be transferred to an application such as presentation software for report generation and

charting.).

computer program code for omitting from memory, in the second pass, entries in

the parsed plurality of entries outside the candidate set (At the time of the invention it

would have been obvious to a person of ordinary skill in the art that the data outside the

determined criteria would not be included in the acceptable dataset which is to be

stored.).

computer program code for processing, during the second pass, the computed

subset of candidate entries according to the determined output criteria to generate the

ordered output display set of entries in a tangible medium of expression on the

graphical user output device (0014; Woodmansee discloses extracting data from the

database system using filters *(output criteria)* , and processing the extracted data to

produce sorted datasets.).

Woodmansee does not expressly disclose *computer program code for parsing, in*

a first pass, a plurality of entries in the setof data;

computer program code for applying, during the first pass, the determined output

criteria to a portion of each parsed entry to compute a subset of candidate entries;

computer program code for parsing, in a second pass, the computed subset of

candidate entries, the second pass performed on the same set of data unmodified from the first pass;

Yankowsky discloses the source parser parses the source document to locate values called for the result XML, the values may be stored in an areas of memory that may be referred to as a values storage cache in the first part parse (first pass), and in the second pass, the output controller populates the values stored in the storage cache in the result document (pages 2-3, paragraphs [0022]-[0033]).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Yankowsky with Woodmansee to include *parsing, in a first pass, a plurality of entries in the set of data; applying, during the first pass, the determined output criteria to a portion of each parsed entry to compute a subset of candidate entries; and parsing, in a second pass, the computed subset of candidate entries, the second pass performed on the same set of data unmodified from the first pass. The techniques of Yankowsky may be used to control the amount of memory that needs to be allocated to a memory cache sued in the mapping of the source file to the result file, and the techniques can reduce the number of passes that a parser needs to make through a source file in order to locate the values called for in the result file (page 1, paragraph [0010]).*

In regards to independent claim 34, Woodmansee discloses *a data management device for organizing and generating report data indicative of a plurality of*

manageable entities renderable on a graphical user output device in a storage area

network (SAN) comprising:

means for determining an output criteria applicable to a set of data to compute an

ordered output display set adapted for inclusion in a report the determined output

criteria including (0003; 0014; Woodmansee discloses developing a set of data filters or

other criteria for selecting relevant information from the database. Woodmansee further

discloses extracting data from the database system using filters *(output criteria)*, and

processing the extracted data to produce sorted datasets.)*:*

a selection criteria indicative of output records for inclusion in the candidate

entries (0003; Woodmansee discloses developing a set of data filters or other criteria for

selecting relevant information from the database.), *the selection criteria including a*

filtering criteria, applying further comprising filtering according to the filtering criteria, the

filtering operable to designate a subset of entries for inclusion in the first pass and the

filtering criteria operable on at least one of the fields for comparison and selective

*inclusion in the designated subset (*0003; Woodmansee discloses developing a set of

data filters or other criteria for selecting relevant information from the database. 0014;

Woodmansee discloses extracting data from the database system using filters *(filtering*

criteria), and processing the extracted data to produce sorted datasets *(subset)*. At the

time of the invention it would have been obvious to a person of ordinary skill in the art

that in order to produce a sorted dataset *(subset)*, the data would undergo a comparison

process to determine the ordering of the data);

an arrangement criteria indicative of display formatting applicable to the

candidate entries (0003; Woodmansee discloses developing a set of data filters or other

criteria for selecting relevant information from the database. The resulting output of a

database query might be transferred to another application (i.e. spreadsheet

application) for examination, sorting and calculation if necessary. The results can further

be transferred to an application such as presentation software for report generation and

charting.).

computer program code for processing, during the second pass, the computed

subset of candidate entries according to the determined output criteria to generate the

ordered output display set of entries in a tangible medium of expression on the

graphical user output device (0014; Woodmansee discloses extracting data from the

database system using filters *(output criteria)* , and processing the extracted data to

produce sorted datasets.).

Woodmansee does not expressly disclose *means for parsing, in a first pass, a*

plurality of entries in the set of data;

means for applying, during the first pass, the determined output criteria to a

portion of each parsed entry to compute a subset of candidate entries;

means for parsing, in a second pass, the computed subset of candidate entries;

means for omitting from memory, in the second pass, entries in the parsed

plurality of entries outside the candidate set, the second pass performed on the same

set of data unmodified from the first pass;

Yankowsky discloses the source parser parses the source document to locate

values called for the result XML, the values may be stored in an areas of memory that

may be referred to as a values storage cache in the first part parse (first pass), and in

the second pass, the output controller populates the values stored in the storage cache

in the result document (pages 2-3, paragraphs [0022]-[0033]).

It would have been obvious to one of ordinary skill in the art at the time the

invention was made to combine the teachings of Yankowsky with Woodmansee to

include *parsing, in a first pass, a plurality of entries in the set of data; applying, during*

the first pass, the determined output criteria to a portion of each parsed entry to

compute a subset of candidate entries; and parsing, in a second pass, the computed

subset of candidate entries, the second pass performed on the same set of data

unmodified from the first pass. The techniques of Yankowsky may be used to control

the amount of memory that needs to be allocated to a memory cache sued in the

mapping of the source file to the result file, and the techniques can reduce the number

of passes that a parser needs to make through a source file in order to locate the values

called for in the result file (page 1, paragraph [0010]).

In regards to independent claim 35, Woodmansee discloses *a method for*

organizing and generating report data indicative of a plurality of manageable entities

renderable on a graphical user output device in a managed information network

comprising:

determining an output criteria applicable to a set of data to compute an

ordered output display set adapted for inclusion in a report *the determined output*

criteria including (0003; 0014; Woodmansee discloses developing a set of data filters or

other criteria for selecting relevant information from the database. Woodmansee further

discloses extracting data from the database system using filters (output criteria), and

processing the extracted data to produce sorted datasets.):

a selection criteria indicative of output records for inclusion in the candidate

entries, the selection criteria corresponding to displayable entries operable for

simultaneous display on an output device (0003; 0038; Woodmansee discloses

developing a set of data filters or other criteria for selecting relevant information from the

database. Woodmansee further discloses the raw data *(displayable entries)* is filtered

and displayed on each client computer. Each client computer may further be loaded

with applications such as Excel, MINTLAB, PowerPoint and PLADB. Thus, these

applications allow the displayable entries to be displayed simultaneously.).

an arrangement criteria indicative of display formatting applicable to the

candidate entries (0003; Woodmansee discloses developing a set of data filters or other

criteria for selecting relevant information from the database. The resulting output of a

database query might be transferred to another application (i.e. spreadsheet

application) for examination, sorting and calculation if necessary. The results can further

be transferred to an application such as presentation software for report generation and

charting.).

retaining in a memory, in the first pass, only the selection and arrangement

criteria fields (0003; Woodmansee discloses developing a set of data filters or other

criteria for selecting relevant information from the database. The resulting output of a

database query might be transferred to another application (i.e. spreadsheet

application) for examination, sorting and calculation if necessary. The results can further

be transferred to an application such as presentation software for report generation and

charting. At the time of the invention it would have been obvious to a person of ordinary

skill in the art that the data outside the determined criteria would not be included in the

acceptable dataset which is to be stored.).

Woodmansee does not expressly disclose *parsing, in a first pass, a plurality of*

entries in the set of data;

applying, during the first pass, the determined output criteria to a

portion of each parsed entry to compute a subset of candidate entries;

parsing, in a second pass, the computed subset of candidate entries, the parsed

entries of the second pass requiring substantially less memory than the first pass such

that the parsed entries of the second pass are stored simultaneously in memory, the

second pass performed on the same set of data unmodified from the first pass;

omitting from memory, in the second pass, entries in the parsed plurality of

entries outside the candidate set.

processing, during the second pass, the computed subset of candidate entries

according to the determined output criteria to generate the ordered output display set of

entries.

Yankowsky discloses the source parser parses the source document to locate

values called for the result XML, the values may be stored in an areas of memory that

may be referred to as a values storage cache in the first part parse (first pass), and in

the second pass, the output controller populates the values stored in the storage cache

in the result document (pages 2-3, paragraphs [0022]-[0033]).

It would have been obvious to one of ordinary skill in the art at the time the

invention was made to combine the teachings of Yankowsky with Woodmansee to

include *parsing, in a first pass, a plurality of entries in the set of data; applying, during*

the first pass, the determined output criteria to a portion of each parsed entry to

compute a subset of candidate entries; and parsing, in a second pass, the computed

subset of candidate entries, the second pass performed on the same set of data

unmodified from the first pass. The techniques of Yankowsky may be used to control

the amount of memory that needs to be allocated to a memory cache sued in the

mapping of the source file to the result file, and the techniques can reduce the number

of passes that a parser needs to make through a source file in order to locate the values

called for in the result file (page 1, paragraph [0010]).

In regarding to independent claim 39, Woodmansee discloses a method for

organizing and generating data indicative of a plurality of manageable entities in a

managed information network comprising (0017; Woodmansee discloses a computer

program product comprising a computer useable medium having computer program

logic stored thereon for enabling a processor in a computer system to organize data):

determining an output criteria applicable to a set of data to compute an ordered

output display set adapted for inclusion in a report, the output criteria including a

selection criteria and an arrangement criteria (0003; 0014; Woodmansee discloses developing a set of data filters or other criteria for selecting relevant information from the database. Woodmansee further discloses extracting data from the database system using filters *(output criteria)*, and processing the extracted data to produce sorted datasets; The resulting output of a database query might be transferred to another application (i.e. spreadsheet application) for examination, sorting and calculation if necessary. The results can further be transferred to an application such as presentation software for report generation and charting);

However, Woodmansee does not disclose parsing, in a first pass, each of the entries in the set of data, the first pass examining partial entries of each of the entries in the set of data, the partial entries including a portion of fields in the entry;

applying, during the first pass, the determined output criteria to the portion of each parsed entry to compute a subset of candidate entries; applying including matching the selection criteria with the examined partial entries;

parsing, in a second pass, the computed subset of candidate entries, the parsing performed on the same set of data unmodified from the first pass;

loading, during the second pass, only entries in the computed subset of candidate entries, loading including entire entries of the entries in the computed subset;

processing, during the second pass, the computed subset of candidate entries according to the determined output criteria to generate the ordered output display set of entries; the second pass consuming substantially less memory than the first pass;

avoiding, during the first pass and the second pass, loading the entire set of data

simultaneously in memory, the set of data being excessively large for concurrent

memory residence; and

presenting the ordered output display set of entries on an output display device

according to the arrangement criteria, the arrangement criteria indicative of a subset

fields in each of the entries in the display set of entries.

Yankovsky discloses the source parser parses the source document to locate

values called for the result XML, the values may be stored in an areas of memory that

may be referred to as a values storage cache in the first part parse (first pass), and in

the second pass, the output controller populates the values stored in the storage cache

in the result document (pages 2-3, paragraphs [0022]-[0033]). Yankovsky also

discloses the document transformation tool creates a mapping of values between a

source document and a result document (matching the selection criteria with the

examined partial entries), and the result document requires the same values in the

same order (generate the ordered output display set of entries) (pages 2, paragraphs

[0024]). Figures 4 and 5 of Yankovsky show values stored in cache of the first pass is

larger than the second pass (the second pass consuming substantially less memory

than the first pass). In addition, Yankovsky discloses a computer having a display

device monitor for displaying information to the user to provide interaction with a user

(page 4, paragraph [0043]).

It would have been obvious to one of ordinary skill in the art at the time the

invention was made to combine the teachings of Yankowsky with Woodmansee to

include parsing, in a first pass, each of the entries in the set of data, the first pass

examining partial entries of each of the entries in the set of data, the partial entries

including a portion of fields in the entry; applying, during the first pass, the determined

output criteria to the portion of each parsed entry to compute a subset of candidate

entries; applying including matching the selection criteria with the examined partial

entries; parsing, in a second pass, the computed subset of candidate entries, the

parsing performed on the same set of data unmodified from the first pass; loading,

during the second pass, only entries in the computed subset of candidate entries,

loading including entire entries of the entries in the computed subset; processing, during

the second pass, the computed subset of candidate entries according to the determined

output criteria to generate the ordered output display set of entries; the second pass

consuming substantially less memory than the first pass; avoiding, during the first pass

and the second pass, loading the entire set of data simultaneously in memory, the set of

data being excessively large for concurrent memory residence; and presenting the

ordered output display set of entries on an output display device according to the

arrangement criteria, the arrangement criteria indicative of a subset fields in each of the

entries in the display set of entries. *The techniques of Yankowsky may be used to*

control the amount of memory that needs to be allocated to a memory cache sued in the

mapping of the source file to the result file, and the techniques can reduce the number

of passes that a parser needs to make through a source file in order to locate the values

called for in the result file (page 1, paragraph [0010]).

In regarding to dependent claim 40, Woodmansee, however, does not disclose wherein the second pass computes and displays a subset of entries corresponding to entries operable for display on a single display screen.

Yankovsky discloses the source parser parses the source document to locate values called for the result XML, the values may be stored in an areas of memory that may be referred to as a values storage cache in the first part parse (first pass), and in the second pass, the output controller populates the values stored in the storage cache in the result document (pages 2-3, paragraphs [0022]-[0033]). Yankovsky also discloses the document transformation tool creates a mapping of values between a source document and a result document (matching the selection criteria with the examined partial entries), and the result document requires the same values in the same order (generate the ordered output display set of entries) (pages 2, paragraphs [0024]). In addition, Yankovsky discloses a computer having a display device monitor for displaying information to the user to provide interaction with a user (page 4, paragraph [0043]).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Yankovsky with Woodmansee to include the second pass computes and displays a subset of entries corresponding to entries operable for display on a single display screen. *The techniques of Yankowsky may be used to control the amount of memory that needs to be allocated to a memory cache sued in the mapping of the source file to the result file, and the techniques can*

reduce the number of passes that a parser needs to make through a source file in order

to locate the values called for in the result file (page 1, paragraph [0010]).

In regarding to dependent claim 41, Woodmansee discloses wherein the

selection criteria and the arrangement criteria are each indicative of an independent

portion of fields of the entries in the set of data (0003; 0014; Woodmansee discloses

developing a set of data filters or other criteria for selecting relevant information from the

database. Woodmansee further discloses extracting data from the database system

using filters *(output criteria)*, and processing the extracted data to produce sorted

datasets. The resulting output of a database query might be transferred to another

application (i.e. spreadsheet application) for examination, sorting and calculation if

necessary. The results can further be transferred to an application such as presentation

software for report generation and charting).

In regarding to dependent claim 42, Woodmansee, however, does not disclose

wherein the first pass and the second pass do not load all record of the set of data

simultaneously in memory during the steps of parsing and processing.

Yankovsky discloses the source parser locates values called for in the result

document, the values may be stored in an areas of memory that may be referred to as a

values storage cache, and the size of the cache is a factor in determining the number of

values that may be stored in the cache (page 2, paragraph [0022]). Yankovsky also

discloses the values storage cache is sized to store four values to illustrate the

operation of the document transformation tool where the cache is not large enough to

store all the values called for by the result document (page 3, paragraph [0028]).

It would have been obvious to one of ordinary skill in the art at the time the

invention was made to combine the teachings of Yankovsky and Woodmansee to

include the first pass and the second pass do not load all record of the set of data

simultaneously in memory during the steps of parsing and processing. *The techniques*

of Yankowsky may be used to control the amount of memory that needs to be allocated

to a memory cache sued in the mapping of the source file to the result file, and the

techniques can reduce the number of passes that a parser needs to make through a

source file in order to locate the values called for in the result file (page 1, paragraph

[0010]).

In regarding to dependent claim 43, Woodmansee discloses wherein the

selection criteria indicates a subset of fields different from a subset if fields indicated by

the arrangement criteria (0003; 0014; Woodmansee discloses developing a set of data

filters or other criteria for selecting relevant information from the database.

Woodmansee further discloses extracting data from the database system using filters

(output criteria), and processing the extracted data to produce sorted datasets).

7.   **Claims 9-10, 17, 20-24, 26 and 27 are rejected under 35 U.S.C. 103(a) as**

being unpatentable over Woodmansee et al. (Pub. No.: US 2002/0178140 A1; Filed

may 25, 2001) (hereinafter 'Woodmansee') in view of Yankowsky, US Patent

Application Publication No. US 2004/0117381, and further in view of Jamshidi et al. (Patent. No.: 6,631,497 B1; Filed: Jul. 19, 1999) (hereinafter 'Jamshidi').

In regards to dependent claims 9, Woodmansee in view of Yankowsky does not expressly disclose *the method of claim 1 wherein the set of data is arranged in a predetermined data set format, the data set format operable to designate entries corresponding to rows and fields corresponding to columns.*

However, Jamshidi teaches *the set of data is arranged in a predetermined data set format, the data set format operable to designate entries corresponding to rows and fields corresponding to columns* (col. 2, lines 16-21; Jamshidi teaches binding data from a data source to one or more cells in a spreadsheet by importing a data object and defining a data source model for a data object.).

Therefore, at the time of the invention it would have been obvious to a person of ordinary skill in the art to combine Woodmansee in view of Yankovsky with Jamshidi for the benefit of providing a seamless two-way link between the spreadsheet and an external data source, so that the two appear to be fully integrated (col.2 lines 34-37).

In regards to dependent claims 10, Woodmansee in view of Yankovsky discloses *the method of claim 1 wherein the predetermined data set format defines a syntax having a nested structure conversant with a parser operable to perform the first parse and the second parse* (Yankovsky, pages 2-3, paragraphs [0022]-[0033]).

Woodmansee in view of Yankovsky does not expressly disclose *the parser*

further operable to extract entries and fields in each of the entries according to rows and

columns.

However, Jamshidi teaches *the set of data is arranged in a predetermined data*

set format, the data set format operable to designate entries corresponding to rows and

fields corresponding to columns (col. 2, lines 16-21; Jamshidi teaches binding data from

a data source to one or more cells in a spreadsheet by importing a data object and

defining a data source model for a data object.).

Therefore, at the time of the invention it would have been obvious to a person of

ordinary skill in the art to combine Woodmansee in view of Yankovsky with Jamshidi for

the benefit of providing a seamless two-way link between the spreadsheet and an

external data source, so that the two appear to be fully integrated (col.2 lines 34-37).

In regards to independent claim 17, *Woodmansee discloses a data*

management device for organizing and generating report data indicative of a plurality of

manageable entities renderable on a graphical user output device in a storage area

network (SAN) comprising:

an infrastructure monitor operable for receiving an output criteria applicable to a

set of data to compute an ordered output display set adapted for inclusion in a report,

the determined output criteria including (0003; 0014; Woodmansee discloses

developing a set of data filters or other criteria for selecting relevant information from the

database. Woodmansee further discloses extracting data from the database system

using filters (output criteria), and processing the extracted data to produce sorted

datasets.):

a selection criteria indicative of output records for inclusion in the candidate

entries (0003; Woodmansee discloses developing a set of data filters or other criteria for

selecting relevant information from the database.).

an arrangement criteria indicative of display formatting applicable to the

candidate entries (0003; Woodmansee discloses developing a set of data filters or other

criteria for selecting relevant information from the database. The resulting output of a

database query might be transferred to another application (i.e. spreadsheet

application) for examination, sorting and calculation if necessary. The results can further

be transferred to an application such as presentation software for report generation and

charting.).

the selection criteria including a filtering criteria, applying further comprising

filtering according to the filtering criteria, the filtering operable to designate a subset of

entries for inclusion in the first pass and the filtering criteria operable on at least one of

the fields for comparison and selective inclusion in the designated subset (0003;

Woodmansee discloses developing a set of data filters or other criteria for selecting

relevant information from the database. 0014; Woodmansee discloses extracting data

from the database system using filters (filtering criteria), and processing the extracted

data to produce sorted datasets (subset). At the time of the invention it would have been

obvious to a person of ordinary skill in the art that in order to produce a sorted dataset

(subset), the data would undergo a comparison process to determine the ordering of the

data);

Woodmansee does not expressly disclose *a parser in the infrastructure monitor*

for parsing, in a first pass, a plurality of entries in the set of data, the parser operable to

omit from memory, in the second pass, entries in the parsed plurality of entries outside

the candidate set;

a first handler in the parser for applying, during the first pass, the determined

output criteria to a portion of each parsed entry to compute a subset of candidate

entries;

a second handler in the parser for parsing, in a second pass, the computed

subset of candidate entries, the second pass performed on the same set of data

unmodified from the first pass, the parser operable to process, during the second pass,

the computed subset of candidate entries according to the determined output criteria to

generate the ordered output display set of entries.

Yankowsky discloses the source parser parses the source document to locate

values called for the result XML, the values may be stored in an areas of memory that

may be referred to as a values storage cache in the first part parse (first pass), and in

the second pass, the output controller populates the values stored in the storage cache

in the result document (pages 2-3, paragraphs [0022]-[0033]).

It would have been obvious to one of ordinary skill in the art at the time the

invention was made to combine the teachings of Yankowsky with Woodmansee to

include *parsing, in a first pass, a plurality of entries in the set of data; applying, during*

the first pass, the determined output criteria to a portion of each parsed entry to

compute a subset of candidate entries; and parsing, in a second pass, the computed

subset of candidate entries, the second pass performed on the same set of data

unmodified from the first pass. The techniques of Yankowsky may be used to control

the amount of memory that needs to be allocated to a memory cache sued in the

mapping of the source file to the result file, and the techniques can reduce the number

of passes that a parser needs to make through a source file in order to locate the values

called for in the result file (page 1, paragraph [0010]).

Woodmansee in view of Yankowsky does not expressly disclose *the data*

management device of claim 17 wherein the set of data is arranged in a predetermined

data set format, the data set format operable to designate entries corresponding to rows

and fields corresponding to columns.

However, Jamshidi teaches *the set of data is arranged in a predetermined data*

set format, the data set format operable to designate entries corresponding to rows and

fields corresponding to columns (col. 2, lines 16-21; Jamshidi teaches binding data from

a data source to one or more cells in a spreadsheet by importing a data object and

defining a data source model for a data object.).

Therefore, at the time of the invention it would have been obvious to a person of

ordinary skill in the art to combine Woodmansee in view of Yankowsky with Jamshidi for

the benefit of providing a seamless two-way link between the spreadsheet and an

external data source, so that the two appear to be fully integrated (col.2 lines 34-37).

In regards to dependent claims 20, Woodmansee discloses *the data*

management device of claim 17 wherein the parser is operable to retain, in a memory,

in the first pass, only the selection and arrangement criteria fields (0014; Woodmansee

discloses extracting data from the database system using filters *(output criteria)*, and

processing the extracted data to produce sorted datasets. Woodmansee further

disclose storing the analysis object *(selection and arrangement criteria fields)* in an

analysis database in the network server.).

In regards to dependent claims 21, Woodmansee discloses *the data*

management device of claim 17 wherein the selection criteria corresponds to

displayable entries operable for simultaneous display on an output device (0038;

Woodmansee discloses the raw data *(displayable entries)* is filtered and displayed on

each client computer. Each client computer may further be loaded with applications

such as Excel, MINTLAB, PowerPoint and PLADB. Thus, these applications allow the

displayable entries to be displayed simultaneously.).

In regards to dependent claims 22, Woodmansee discloses *the data*

management device of claim 17 wherein the arrangement criteria is indicative of

ordering logic applicable to a subset of fields each of the entries based on a comparison

of the fields in the entries (0014; Woodmansee discloses extracting data from the

database system using filters, and processing the extracted data to produce sorted

datasets. At the time of the invention it would have been obvious to a person of ordinary

skill in the art that in order to produce a sorted dataset, the data would undergo a

comparison process to determine the ordering of the data.).

In regards to dependent claims 23, Woodmansee discloses *the data*

management device of claim 22 wherein the ordering logic processes at least one of the

fields according to ascending or descending values (0014; 0038; Woodmansee

discloses extracting data from the database system using filters *(output criteria),* and

processing the extracted data to produce sorted datasets. At the time of the invention it

would have been obvious to a person of ordinary skill in the art that in order to produce

a sorted dataset, the data would undergo a comparison process to determine the

ordering of the data. Woodmansee further discloses the raw data *(dataset)* is filtered

and displayed on each client computer. Each client computer may further be loaded

with applications such as Excel. It has been established and is well known in the art that

applications such as Excel, can sort a dataset in either alphabetical or numerical order,

depending on the data type of the dataset, thus sorting the dataset according to

ascending or descending values.).

In regards to dependent claims 24, Woodmansee discloses *the data*

management device of claim 17 wherein the determined criteria is operable on key

fields of the entries, the key fields having scalar values operable for comparison (0014;

0038; Woodmansee discloses extracting data from the database system using filters

(output criteria), and processing the extracted data to produce sorted datasets. At the

time of the invention it would have been obvious to a person of ordinary skill in the art

that in order to produce a sorted dataset, the data would undergo a comparison process

to determine the ordering of the data. Woodmansee further discloses the raw data

(dataset) is filtered and displayed on each client computer. Each client computer may

further be loaded with applications such as Excel. It has been established and is well

known in the art that applications such as Excel, can sort a dataset in either alphabetical

or numerical order, depending on the data type of the dataset, thus sorting the dataset

according to *ascending or descending values.).*

In regards to dependent claims 26, Woodmansee in view of Yankowsky

discloses *the data management device of claim 25 wherein the predetermined data set*

format defines a syntax having a nested structure conversant with a parser operable to

perform the first parse and the second parse (Yankowsky, pages 2-3, paragraphs

[0022]-[0033]).

Woodmansee in view of Yankowsky does not expressly disclose *the parser*

further operable to extract entries and fields in each of the entries according to rows and

columns.

However, Jamshidi teaches *the set of data is arranged in a predetermined data*

set format, the data set format operable to designate entries corresponding to rows and

fields corresponding to columns (col. 2, lines 16-21); Jamshidi teaches binding data

from a data source to one or more cells in a spreadsheet by importing a data object and

defining a data source model for a data object.).

Therefore, at the time of the invention it would have been obvious to a person of ordinary skill in the art to combine Woodmansee in view of Yankowsky with Jamshidi for the benefit of providing a seamless two-way link between the spreadsheet and an external data source, so that the two appear to be fully integrated (col.2 lines 34-37).

In regards to dependent claims 27, *the data management device of claim 17 further comprising filtering according to a filtering criteria, the filtering operable to designate a subset of entries for inclusion in the first pass and the filtering criteria operable on at least one of the field for comparison and selective inclusion in the designated subset* (0014; Woodmansee discloses extracting data from the database system using filters, and processing the extracted data to produce sorted datasets. At the time of the invention it would have been obvious to a person of ordinary skill in the art that in order to produce a sorted dataset, the data would undergo a comparison process to determine the ordering of the data.).

8.   **Claims 12-14 and 36-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Woodmansee et al. (Pub. No.: US 2002/0178140 A1; Filed may 25, 2001) (hereinafter 'Woodmansee') in view of Yankowsky, US Patent Application Publication No. US 2004/0117381, and further in view of Bates et al. (Patent No.: US 6,901,403 B1; Filing Date: Sep. 14, 2001) (hereinafter 'Bates').**

In regards to dependent claims 12, Woodmansee and Yankowsky do not

expressly disclose *the method of claim 1 wherein parsing further comprises generating*

parsing events for initiating callback operations, the callback operable on the data set

according to predetermined logic.

However, Bates discloses *generating parsing events for initiating callback*

operations, the callback operable on the data set according to predetermined logic

(column 11, lines 54-66; Bates teaches a file system interface provide callbacks

corresponding to system requests and communicate the requests to the data access

manager).

Therefore, at the time of the invention, it would have been obvious to a person of

ordinary skill in the art to combine Woodmansee and Yankovsky with Bates for the

benefit of a simplified and intuitive means of accessing, presenting, manipulating, and

modifying data associated with one or more data source (column 1, lines 25-28).

In regards to dependent claims 13, Woodmansee in view of Yankovsky does

not expressly disclose *the method of claim 12 wherein the parsing event correspond to*

predetermined syntactical structure, and the callback operations are operable for

applying the determined output criteria on the entries in the data set.

However, Bates teaches *the method of claim 12 wherein the parsing event*

correspond to predetermined syntactical structure, and the callback operations are

operable for applying the determined output criteria on the entries in the data set (col.

11, lines 54 - col. 12, line 8; Bates teaches a file system interface provide callbacks

corresponding to system requests and communicate the requests to the data access

manager. Information in the messages may include an indication of a table in the

relational database, and a certain data element (or criteria to determine the data

elements) in the table.).

Therefore, at the time of the invention, it would have been obvious to a person of

ordinary skill in the art to combine Woodmansee in view of Yankovsky with Bates for the

benefit of a simplified and intuitive means of accessing, presenting, manipulating, and

modifying data associated with one or more data source (column 1, lines 25-28).

In regards to dependent claims 14, Woodmansee in view of Yankovsky does

not expressly disclose *the method of claim 13 wherein the callback operations further*

include building the candidate set, filtering the entries in the data set, matching entries

in the candidate set, sorting entries in the candidate set, and formatting entries in the

candidate set.

However, Bates teaches *the method of claim 13 wherein the callback operations*

further include building the candidate set, filtering the entries in the data set, matching

entries in the candidate set, sorting entries in the candidate set, and formatting entries

in the candidate set (column 11, lines 54-66; Bates teaches a file system interface

provide callbacks corresponding to system requests and communicate the requests to

the data access manager, supply data to the operating system in a format conforming to

the operating system, and perform other desired tasks). Using the broadest

interpretation of "perform other desired tasks", the examiner believes this to include, but

not be limited to, *building the candidate set, filtering the entries in the data set, matching entries in the candidate set, sorting entries in the candidate set, and formatting entries in the candidate set.*).

Therefore, at the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine Woodmansee in view of Yankovsky with Bates for the benefit of a simplified and intuitive means of accessing, presenting, manipulating, and modifying data associated with one or more data source (column 1, lines 25-28).

In regards to dependent claim 36, Woodmansee in view of *Yankovsky* does not expressly disclose *the method of claim 35 wherein parsing further comprises generating parsing events for initiating callback operations, the callback operations operable on the data set according to predetermined logic, the parsing event corresponding to predetermined syntactical structures, and the callback operations are operable for applying the determined output criteria on the entries in the data set, wherein the callback operations further include building the candidate set, filtering the entries in the data set, matching entries in the candidate set, sorting entries in the candidate set, and formatting entries in the candidate set.*

However, Bates teaches *the method of claim 35 wherein parsing further comprises generating parsing events for initiating callback operations, the callback operations operable on the data set according to predetermined logic, the parsing event corresponding to predetermined syntactical structures, and the callback operations are operable for applying the determined output criteria on the entries in the data set,*

wherein the callback operations further include building the candidate set, filtering the

entries in the data set, matching entries in the candidate set, sorting entries in the

candidate set, and formatting entries in the candidate set (col. 11, lines 54 - col. 12, line

8; Bates teaches a file system interface provide callbacks corresponding to system

requests and communicate the requests to the data access manager. Information in the

messages may include an indication of a table in the relational database, and a certain

data element (or criteria to determine the data elements) in the table. Bates further

teaches the file system interface provides supply data to the operating system in a

format conforming to the operating system, and performs other desired tasks. Using the

broadest interpretation of "perform other desired tasks", the examiner believes this to

include, but not be limited to, building the candidate set, filtering the entries in the data

set, matching entries in the candidate set, sorting entries in the candidate set, and

formatting entries in the candidate set.).

Therefore, at the time of the invention, it would have been obvious to a person of

ordinary skill in the art to combine Woodmansee in view of *Yankovsky* with Bates for the

benefit of a simplified and intuitive means of accessing, presenting, manipulating, and

modifying data associated with one or more data source (column 1, lines 25-28).

In regards to dependent claim 37, Woodmansee in view of *Yankovsky* does

not expressly disclose *the method of claim 36 wherein the parsed entries in the first*

pass are excessively large for concurrent memory residence.

However, Bates teaches *the method of claim 36 wherein the parsed entries in the first pass are excessively large for concurrent memory residence* (col. 23, line 66-col. 24, lines 25; Bates teaches reading data from a file or portion for lager files that surpass the capacity of the DataIOCTL.).

Therefore, at the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine Woodmansee in view of *Yankovsky* with Bates for the benefit of a simplified and intuitive means of accessing, presenting, manipulating, and *modifying data associated with one or more data source (column 1, lines 25-28).*

9.   **Claims 28-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Woodmansee et al. (Pub. No.: US 2002/0178140 A1; Filed may 25, 2001) (hereinafter 'Woodmansee') in view of Yankovsky, US Patent Application Publication No. US 2004/0117381, Jamshidi et al. (Patent. No.: 6,631,497 B1; Filed: Jul. 19, 1999) (hereinafter 'Jamshidi') and further in view of Bates et al. (Patent No.: US 6,901,403 B1; Filing Date: Sep. 14, 2001) (hereinafter 'Bates').**

In regards to dependent claims 28, Woodmansee, Yankovsky and Jamshidi do not expressly disclose *the data management device of claim 17 wherein parsing further comprises generating parsing events for initiating callback operations, the callback operable on the data set according to predetermined logic.*

However, Bates discloses *generating parsing events for initiating callback operations, the callback operable on the data set according to predetermined logic* (column 11, lines 54-66; Bates teaches a file system interface provide callbacks

corresponding to system requests and communicate the requests to the data access

manager).

Therefore, at the time of the invention, it would have been obvious to a person of

ordinary skill in the art to combine Woodmansee, Yankovsky and Jamshidi with Bates

for the benefit of a simplified and intuitive means of accessing, presenting, manipulating,

and modifying data associated with one or more data source (column 1, lines 25-28).

In regards to dependent claims 29, Woodmansee, Yankovsky and Jamshidi do

not expressly disclose *the data management device of claim 17 wherein the parsing*

event correspond to predetermined syntactical structure, and the callback operations

are operable for applying the determined output criteria on the entries in the data set.

However, Bates teaches *the data management device of claim 17 wherein the*

parsing event correspond to predetermined syntactical structure, and the callback

operations are operable for applying the determined output criteria on the entries in the

data set (col. 11, lines 54 - col. 12, line 8; Bates teaches a file system interface provide

callbacks corresponding to system requests and communicate the requests to the data

access manager. Information in the messages may include an indication of a table in

the relational database, and a certain data element (or criteria to determine the data

elements) in the table.).

Therefore, at the time of the invention, it would have been obvious to a person of

ordinary skill in the art to combine Woodmansee in view of Yankovsky with Bates for the

benefit of a simplified and intuitive means of accessing, presenting, manipulating, and

modifying data associated with one or more data source (column 1, lines 25-28).

10.   **Claim 31 is rejected under 35 U.S.C. 103(a) as being unpatentable over**

Woodmansee et al. (Pub. No.: US 2002/0178140 A1; Filed may 25, 2001)

(hereinafter 'Woodmansee') in view of Yankovsky, US Patent Application

Publication No. US 2004/0117381, further in view of Cuckson et al. (Pub. No.: US

2004/0193646 A1; Filed Mar 31, 2003) (hereinafter 'Cuckson').

In regards to independent claim 31, Woodmansee discloses a *method for*

efficient memory usage for organizing and generating report data indicative of a plurality

of manageable entities in a storage area network (SAN) comprising:

determining, via a user input request, an output criteria applicable to a set of data

to compute an ordered output display set adapted for inclusion in a parsing, by a build

set handler, in a first pass, a plurality of entries in the set of data (0003; 0014;

Woodmansee discloses developing a set of data filters or other criteria for selecting

relevant information from the database. Woodmansee further discloses extracting data

from the database system using filters *(output criteria)*, and processing the extracted

data to produce sorted datasets.)

filtering according to the filtering criteria, the filtering operable to designate a

subset of entries for inclusion in the first pass and the filtering criteria operable on at

least one of the fields for comparison and selective inclusion in the designated subset

(0003; Woodmansee discloses developing a set of data filters or other criteria for

selecting relevant information from the database. 0014; Woodmansee discloses

extracting data from the database system using filters *(filtering criteria)*, and processing

the extracted data to produce sorted datasets *(subset)*. At the time of the invention it

would have been obvious to a person of ordinary skill in the art that in order to produce

a sorted dataset *(subset)*, the data would undergo a comparison process to determine

the ordering of the data);

retrieving, during the parsing, a portion of each of the plurality of entries, wherein

the parsed entries in the first pass are excessively large for concurrent memory

residence (0003; 0014; Woodmansee discloses developing a set of data filters or other

criteria for selecting relevant information from the database. Using the broadest

interpretation, the Examiner concludes the entries retrieved from the database(s) could

have possible been *excessively large for concurrent memory residence.*)

applying, during the first pass, the determined output criteria to the retrieved

portion of each parsed entry to compute a subset of candidate entries, the candidate

entries computed by determination of a range of entries from the set of data, the range

operable for inclusion in a common display screen area (0038; 0003; 0014;

Woodmansee discloses developing a set of data filters or other criteria for selecting

relevant information from the database. Woodmansee further discloses extracting data

from the database system using filters, and processing the extracted data to produce

sorted datasets. Woodmansee discloses the raw data is filtered and displayed on each

client computer. Each client computer may further be loaded with applications such as

Excel, MINTLAB, PowerPoint and PLADB. Thus, these applications allow the

displayable entries to be displayed simultaneously.).

   wherein the first pass further comprises filtering entries for omission from the

candidate set and comparing key fields in entries for inclusion in the candidate set

(0003; 0014; Woodmansee discloses developing a set of data filters or other criteria for

selecting relevant information from the database. Woodmansee further discloses

extracting data from the database system using filters, and processing the extracted

data to produce sorted datasets. At the time of the invention it would have been obvious

to a person of ordinary skill in the art that in order to produce a sorted dataset, the data

would undergo a comparison process to determine the ordering of the data.)

   the second pass further comprises matching entries for inclusion in the candidate

set, sorting entries in the candidate set, and formatting entries in the candidate set for

display on the output device (0003; 0014; Woodmansee discloses developing a set of

data filters or other criteria for selecting relevant information from the database. Using

the broadest interpretation, the Examiner believes these criterias to include, but not be

limited to *matching entries for inclusion in the candidate set, sorting entries in the*

candidate set, and formatting entries in the candidate set for display on the output

device. Woodmansee further discloses extracting data from the database system using

filters *(output criteria)*, and processing the extracted data to produce sorted datasets.)

   Woodmansee does not expressly disclose *parsing, by a match set handler, in a*

second pass, the computed subset of candidate entries to identify entries in the data set

corresponding to the portions of entries in the candidate entries, the second pass

performed on the same set of data unmodified from the first pass;

retrieving, by the match set handler, the entire entry corresponding to each of the

portion of the entry in the candidate entries;

processing, by a sort handler, during the second pass, the computed subset of

candidate entries according to the determined output criteria to generate complete

entries of the entries in the candidate set, wherein the parsed entries of the second

pass require substantially less memory than the first pass such that the parsed entries

of the second pass are stored simultaneously in memory;

Yankowsky discloses the source parser parses the source document to locate

values called for the result XML, the values may be stored in an areas of memory that

may be referred to as a values storage cache in the first part parse (first pass), and in

the second pass, the output controller populates the values stored in the storage cache

in the result document (pages 2-3, paragraphs [0022]-[0033]).

It would have been obvious to one of ordinary skill in the art at the time the

invention was made to combine the teachings of Yankowsky with Woodmansee to

include *parsing, in a first pass, a plurality of entries in the set of data; applying, during*

the first pass, the determined output criteria to a portion of each parsed entry to

compute a subset of candidate entries; and parsing, in a second pass, the computed

subset of candidate entries, the second pass performed on the same set of data

unmodified from the first pass. The techniques of Yankowsky may be used to control

the amount of memory that needs to be allocated to a memory cache sued in the

mapping of the source file to the result file, and the techniques can reduce the number

of passes that a parser needs to make through a source file in order to locate the values

called for in the result file (page 1, paragraph [0010]).

Woodmansee in view of Yankovsky does not expressly disclose formatting, by a

format handler, the processed complete entries to generate the output display set of

entries, the output display set of entries corresponding to the *determined range and*

ordered according to the ordering logic;

However, Cuckson teaches *by the match set handler, the entire entry*

corresponding to each of the portion of the entry in the candidate entries logic (0020;

Cuckson teaches data for the data environment are loaded into records. Each record

includes a start field and a end field, which identifies the earliest and latest point in time

in which data is applied to the record).

formatting, by a format handler, the processed complete entries to generate the

output display set of entries, the output display set of entries corresponding to the

determined range and ordered according to the ordering logic (0019; 0045; Cuckson

teaches it may be necessary to map data from one or more data environments into a

consistent format. Cuckson further teaches the specific format may depend on the

particular software used to operate the system. In a specific embodiment the method to

carry out using Oracle database software; however other programs may use Microsoft

Access, DB2, and Microsoft Excel.).

Therefore, at the time of the invention, it would have been obvious to a person of

ordinary skill in the art to combine Woodmansee in view of Yankovsky with Cucksons

for the benefit of efficiently managing systems having very larger volumes of data

(0013).

Response to Arguments

Applicant's arguments and amendments filed on 05/29/2007 have been fully considered

and they are deemed fully persuasive based on Myhrvold reference.   Applicant's

arguments with respect to claims 1, 17, 31-32, 34-35 and 39-43 have been considered

but are moot in view of the new ground(s) of rejection (under Woodmansee in view of

Yankovsky)   as   explained   here   below,   necessitated   by   Applicant's   substantial

amendment (i.e., the second pass performed on the same set of data unmodified form

the first pass) to the claims which significantly affected the scope thereof.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chau Nguyen whose telephone number is (571) 272-4092. The Examiner can normally be reached on Monday-Friday from 8:30 am to 5:30 pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Doug Hutton, can be reached at (571) 272-4137.

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. On July 15, 2005, the Central Facsimile (FAX) Number will change from 703-872-9306 to 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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